

Listing of Claims:

This listing of claims will replace all prior claim listings

1. (Previously Presented) A method for routing calls in a distributed mobile switching center environment, the distributed mobile switching center including at least a plurality of Media Gateways and a Mobile Switching Center Server, the method comprising:

receiving a call at a first node in a telecommunication network, wherein the first node includes a plurality of Media Gateways, the first node associated with a plurality of trunks;

identifying an interconnection constraint comprising at least one of a preference and a restriction relating to selection of a circuit among a plurality of circuits associated with one of the plurality of trunks associated with the first node for routing the call;

inputting the call into a Mobile Switching Center server to derive a number translation in which the number is translated and a route index is identified, wherein the route index points to a route list that includes a sequence of routing rules for routing the call, wherein the routing rules include the interconnection constraint; and

routing the call to a trunk in accordance with the interconnection constraint, wherein the plurality of Media Gateways further comprises a cluster comprising a single switch that uses a single set of routing translations.

2. (Original) The method of claim 1 wherein the first node comprises one of a plurality of IO nodes operable to handle bearer traffic, each of the plurality of nodes operating under control of a server using signaling traffic associated with the bearer traffic.

3. (Original) The method of claim 2 wherein the constraint relates to one of a preference or a restriction against routing the call through an interconnection with another of the plurality of nodes.

4. (Original) The method of claim 3 wherein the constraint is defined in a set of routing rules based on data relating to the call.

5. (Original) The method of claim 3 wherein the server controls routing of the call to a trunk.
6. (Original) The method of claim 3 wherein the preference comprises: selecting a circuit associated with the first node for routing the call if a circuit associated with the first node is available; and allowing use of a circuit associated with a particular other one of the plurality of nodes through an interconnection with the particular one of the plurality of nodes if a circuit associated with the first node is not available.
7. (Original) The method of claim 3 wherein the restriction comprises precluding selection of a circuit associated with one of the plurality of nodes other than the first node.
8. (Original) The method of claim 2 wherein each of the plurality of trunks is associated with a plurality of circuits, and each node is associated with at least one circuit for each trunk.
9. (Original) The method of claim 2 wherein at least two of the nodes serve an overlapping geographical area.
10. (Original) The method of claim 2 wherein at least two of the nodes serve different geographical areas.
11. (Previously Presented) A telecommunications system comprising: a distributed mobile switching center, the distributed mobile switching center including at least a plurality of Media Gateways and a server, including:
 - a plurality of media gateways, each media gateway associated with a plurality of trunks;
 - a number translator in which a received call is translated and a route index is identified, wherein the route index points to a route list that includes a sequence of routing rules for routing the call, wherein the routing rules include an interconnection constraint associated with each media gateway; and

a server operable to control routing for the plurality of media gateways based on the interconnection constraint associated with each media gateway, the interconnection constraint comprising at least one of a preference and a restriction relating to selecting a circuit among a plurality of circuits associated with a terminating trunk for a call based on at least the media gateway receiving the call, wherein the plurality of Media Gateways further comprises a cluster comprising a single switch that uses a single set of routing translations

12. (Original) The telecommunications system of claim 11 wherein the plurality of media gateways comprise a cluster of media gateways having interconnections between media gateways in the cluster and the constraint providing at least one of a preference or a restriction against routing the call through the interconnection.

13. (Original) The telecommunications system of claim 12 wherein each of the plurality of trunks is associated with a plurality of circuits and each media gateway in the cluster is associated with at least one of the circuits for each of the plurality of trunks.

14. (Original) The telecommunications system of claim 13 wherein the call is associated with a particular circuit associated with an originating trunk and the media gateway receiving the call is associated with the particular circuit.

15. (Original) The telecommunications system of claim 12 wherein the restriction comprises precluding selecting a circuit associated with one of the plurality of media gateways other than the media gateway receiving the call and the preference comprises:

selecting a circuit associated with the media gateway receiving the call if a circuit associated with the media gateway receiving the call is available; and

allowing use of a circuit associated with a particular other one of the plurality of media gateways through an interconnection with the particular media gateway if a circuit associated with the media gateway receiving the call is not available.

16. (Original) The telecommunications system of claim 11 wherein the server handles signaling traffic for the distributed mobile switching center and the plurality of media gateways handle bearer traffic for the distributed mobile switching center.

17. (Previously Presented) machine-readable storage device comprising a medium for storing instructions for causing data processing apparatus to:

receive data indicating receipt of a call at a first node of a plurality of nodes, wherein each node comprises a Media Gateway, in a telecommunication network, telecommunication network including at least a plurality of Media Gateways and a Mobile Switching Center Server, the first node associated with a plurality of trunks, the call received on an originating trunk of the plurality of trunks, and the plurality of nodes providing switching operations under the control of a call server;

identify an interconnection constraint comprising at least one of a preference and a restriction relating to selecting a circuit among a plurality of circuits associated with one of the plurality of trunks associated with the first node for routing the call;

input the call into a Mobile Switching Center server to derive a number translation in which the number is translated and a route index is identified, wherein the route index points to a route list that includes a sequence of routing rules for routing the call; and

control routing of the call to a trunk in accordance with the interconnection constraint, wherein in selected situations the plurality of Media Gateways further comprises a cluster comprising a single switch that uses a single set of routing translations.

18. (Previously Presented) The machine-readable storage device of claim 17 wherein the constraint comprises a limitation on routing the call through an interconnection with another of the plurality of nodes.

19. (Previously Presented) The machine-readable storage device of claim 17 wherein the constraint is included in a set of routing rules assigned to the call and the constraint is associated with the first node.

20. (Previously Presented) The machine-readable storage device of claim 17 wherein each of the plurality of trunks is associated with a plurality of circuits, and each node is associated with at least one circuit for each trunk.